

# **EXHIBIT 1**

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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METSO MINERALS INC.,

Plaintiff,

v.

POWERSCREEN INTERNATIONAL  
DISTRIBUTION LIMITED,  
TEREX CORPORATION,  
POWERSCREEN NEW YORK, INC., and  
EMERALD EQUIPMENT SYSTEMS, INC.,

Defendants.  
-----X

Civil Action No. CV-06-01446  
(ADS) (ETB)

**METSO'S OPPOSITION EXPERT REPORT OF STEPHEN A. WHYTE**

1. I submitted an Expert Report dated June 24, 2008 in this matter on behalf of plaintiff Metso Minerals Inc. ("Metso"). I now submit this Opposition Expert Report in response to the Expert Reports submitted by defendants on June 27, 2008 with respect to the validity and enforceability of U.S. Patent No. 5,577,618 ("the '618 patent").

2. All opinions and facts stated herein are true and correct to the best of my knowledge. I understand that discovery has not closed in this litigation and additional documents, depositions, or other discovery may be produced, taken or obtained before trial. I reserve the right to modify or supplement this Opposition Expert Report if and when appropriate, particularly based upon additional information, evidence, or argument of which I am made aware before trial.

3. I reserve the right to supplement or to amend my opinions in response to opinions expressed by defendants' experts, or in light of any additional evidence, testimony, discovery or other information that may be provided to me after the date of this Opposition Expert Report or specifically relied upon by defendants.

4. I may rely on visual aids, demonstrative exhibits, or additional documents that demonstrate the bases of my opinions and may assist me in explaining the bases for my opinions. Examples of those visual aids, demonstrative exhibits, and additional documents may include, for example, excerpts from patent specifications, patents, deposition testimony, deposition exhibits, documents produced in this litigation, as well as charts, diagrams, animations, videos, or other relevant presentations. The documents cited in this Opposition Expert Report are exemplary, and this Opposition Expert Report is not an exhaustive listing of all pertinent documents supporting my opinions.

5. The contents of my June 24, 2008 Expert Report are still correct.

6. The documents or other information that I have considered in forming the opinions in this Expert Report are discussed below and/or attached hereto.

#### **I. A PERSON OF ORDINARY SKILL IN THE ART**

7. Based upon my education, experience and review of the '618 patent, the prior art, and other materials and mobile aggregate material processing plants that I have reviewed and that I am aware of, with respect to the claims of the '618 patent, it is my opinion that a person of ordinary skill in the art would be a mechanical designer or engineer with at least 2 to 4 years of formal technical and/or engineering education and at least 2 to 4 years of on-the-job training in the design of road-haulable, mobile aggregate material processing plants (including screening, crushing and/or trommel machines) having one or more belt conveyors that fold into a compact transport position, or a person who has obtained equivalent training and experience in the field.

#### **II. INFRINGING MACHINES SOLD BY COMPANIES OTHER THAN POWERSCREEN**

8. I am generally familiar with the design and operation of screening machines made and sold by other companies. Of these machines, I am aware of the following screening machines that are configured and operate as recited in at least claims 1 to 7 and 9 of the '618 patent:

<b>Model</b>	<b>Manufacturer</b>	<b>Photographs</b>
E-7	Extec Screens and Crushers Ltd.	Exhibit SAW 10
Novum	Keestrack N.V.	Exhibit SAW 11
Combo	Keestrack N.V.	Exhibit SAW 12
Explorer 1800	Keestrack N.V.	Exhibit SAW 13
Explorer 1800 3D	Keestrack N.V.	Exhibit SAW 14
Frontier (also known as Pioneer)	Keestrack N.V.	Exhibit SAW 15
540	Fintec Crushing & Screening Ltd.	Exhibit SAW 16
542	Fintec Crushing & Screening Ltd.	Exhibit SAW 17
570	Fintec Crushing & Screening Ltd.	Exhibit SAW 18

9. All of the above identified screeners were commercially introduced after Metso (or its predecessor company) first commercially introduced a screener covered by the claims of the '618 patent.

### **III. THE CONTESTED PORTIONS OF THE '618 PATENT ARE ENABLED AND CLEAR**

10. I have read those portions of Metso's Opposition Expert Report of Arthur Steiner in which he opines that (1) the claim term, "at least one lateral delivery conveyor incorporated in the outfeed delivery means" element of claim 1 of the '618 patent is fully enabled by the written description of the specification and figures of the '618 patent, (2) the claim term "does not project laterally beyond the chassis" recited in claims 1 and 12 is fully enabled by the written description of the specification and figures of the '618 patent, and (3) claim 12 and the '618 patent is clear and does describe an embodiment in which the material outfeed and maintenance positions of the tail section of the lateral conveyor are the same, or "combined", as recited in claim 12. I agree with his opinions, and it is my opinion that a person of ordinary skill in the art would be able to understand the meanings of those contested portions of the '618 patent after reading the '618 patent.

### **IV. THE OPERATION OF THE DOMINATOR SCREENER**

11. I am generally familiar with the operation of the Dominator screener shown in the photographs attached in Exhibit D to the Defendants' Expert Report (June 27, 2008) of Loeffler.

12. In the Dominator's operational position, two lateral conveyors extend laterally away from the rest of the machine, one on each side of the machine, so that the lateral conveyors are slanted upward, as shown in Exhibit D to the Expert Report (June 27, 2008) of Loeffler, page MN000329, top drawing. Processed material from the screens of the machine are deposited on to an endless moving conveyor belt on a first section of each lateral conveyor and are conveyed to a head section of each lateral conveyor by the moving belt.

13. In the Dominator's transport position, which is shown in the first three pages (the photographs) of Exhibit D to the Expert Report (June 27, 2008) of Loeffler, a first section of each lateral conveyor is folded straight upward, to a vertical position, and the head section (which is pivotably connected to the first section) is folded around a pivot so that it is over, and parallel to, and laterally outside the rest of the conveyor, so that the head section is vertical and pointing down. The conveyor belt of the lateral conveyor is thus folded across its width. Using the characterization of Mr. Loeffler (page 23), the folded lateral conveyors in the Dominator screener are each of double depth in the lateral dimension of the screener in that the head section overlaps with the first section. The lateral conveyors in the transport position do not extend laterally beyond the width of the frame of the apparatus, including its laterally extending platforms and tires.

## **V. THE OPERATION OF VARIOUS PRIOR ART MACHINES**

14. U.S. Patent No. 5,120,433 (Osadchuk) discloses an apparatus with a lateral conveyor 256 that folds from a laterally extending operational position around a hinge 264 to a substantially vertical transport position. Figure 4 of Osadchuk shows the lateral conveyor 256 in its folded transport position in solid lines, and in its operational position in dashed lines. Figure 4 is discussed at col. 7, lines 3-41.

15. U.S. Patent No. 5,234,564 (Smith) discloses a mobile screening machine with two lateral conveyors 132, 172 that fold from a laterally extending operational position (as shown in

Figure 2) around pivot 142 to a substantially vertical transport position (as shown in Figures 1 and 3). Figure 3 of Smith shows the lateral conveyor 130 in its folded transport position in solid lines, and in its operational position in dashed lines. Figure 3 is discussed at col. 4, lines 32-54. In Figure 2, the pivot 142 of each of the lateral conveyors 132, 172 are not labeled but appear to be positioned along dashed lines perpendicular to the conveyors. Based upon the positions of these pivots in Figures 2 and 3, it would appear that the lateral conveyors in their folded vertical transport position would not extend laterally beyond the width of the frame of the apparatus, including its laterally extending platforms.

16. U.S. Patent No. 4,591,432 (Hartl) discloses a mobile conveyor for a screener with a conveyor (comprising an upper section 1 and a lower section 2) that has an end upper section 1 that is extended in the conveyor's operational position and that is folded over, and parallel to, the remaining part (the lower section 2) of the conveyor in its transport position. Figure 1 of Hartl shows the conveyor end section 1 in its operational position, and Figure 2 of Hartl shows the conveyor end section 1 in its folded transport position after pivoting about hinge 6. Figures 1 and 2 are discussed at col. 3, lines 32-59.

17. U.K. Patent No. 1,449,001 (Powerscreen) was cited during the prosecution of the '618 patent. U.K. '001 discloses a mobile screening machine of defendant Powerscreen having two lateral delivery conveyors 43 that receive different sized screened material and feed the screened material laterally away from the rest of the machine.

18. U.K. Patent No. 1,480,688 (Machines & Structures Ltd.) was cited during the prosecution of the '618 patent. U.K. '688 discloses a mobile screening machine having four lateral delivery conveyors 11, 12, 13, 14 that receive different sized screened material and feed the screened material laterally away from the rest of the machine. In the machine's transport position, it appears that the lateral delivery conveyors 11, 12, 13, 14 do not extend beyond the frame's tires.

19. Powerscreen's PCT Patent Application WO 85/03652 (which appears to correspond to U.S. Patent No. 4,983,280 (Eriksson)), discloses a screening machine in which the lateral conveyors (referred to as "lateral boom elevators" 18, 20) fold, unbroken, to assume a longitudinal transport position, as shown in Fig. 3 in those publications. In the machine's transport position, it appears that the lateral conveyors 18, 20 do not extend beyond the frame's tires. I recognize the design shown in these patent publications as a Powerscreen Chieftain that was commercially sold by Powerscreen.

20. U.S. Patent No. 4,160,501 (Johannsen) discloses a conveyor in which one or both end sections 12, 14 of the conveyor are folded into a transport position in which each folded end section is folded longitudinally about vertical pivot points 16, 18 so that the folded end section 12, 14 is alongside and parallel to the center portion 10 of the conveyor, as shown in Figs. 1 to 4.

21. U.S. Patent No. 3,444,987 (Palmer) discloses a conveyor, substantially identical to that disclosed in U.S. Patent No. 4,160,501 (Johannsen), in which both end sections 36, 37 of the conveyor are folded into a transport position in which each folded end section is folded longitudinally about a vertical pivot points 38, 39 so that the folded end section 36, 37 is alongside and parallel to the center portion 31 of the conveyor, as shown in Figs. 1 and 2.

22. As to the MasterStock 70 and 80 conveyors, the Expert Report of Loeffler (dated June 27, 2008) provides insufficient information for me to understand how those conveyors operate, and I am unfamiliar with them. However, I note that defendants' Expert Report of Goffney (dated June 27, 2008) states (§ 97) that U.S. Patent No. 3,444,987 (Palmer) teaches the same pivoting mechanism of the MasterStock 70 and 80 conveyors and that Palmer is cumulative of the MasterStock 70 and 80 conveyors. The Expert Report of Loeffler (dated June 27, 2008) appears to confirm (page 26) that Palmer teaches the same pivoting mechanism of the MasterStock 70 and 80 conveyors.

23. European Patent Application No. EP 0,338,752 A1 (Extec) (which appears to correspond to U.S. Patent No. 5,044,484 (Douglas)) discloses a conveyor frame for a conveyor which folds into a transport position so that a first tail section 1 is flat against the chassis 3 of the machine, so that an intermediate section 5 (pivotally connected to the tail section 1) is vertical, and so that a head section 7 (pivotally connected to the intermediate section 5) is parallel to and above the tail section 1, as shown in Fig. 1. Alternatively, the conveyor frame can have a fourth section 16 (pivotally connected to the head section 7) that folds down so that it is vertical and parallel to the intermediate section 5, as shown in Fig. 4.

#### **VI. THE INVENTION CLAIMED IN THE '618 PATENT IS NOT OBVIOUS TO A PERSON OF ORDINARY SKILL IN THE ART**

24. Mr. Loeffler states (page 23) that the “problem to be solved” by the ‘618 patent was “to provide a road-hauled aggregate material processing plant which has lateral conveyors which may be moved to a transport position within the lateral and vertical dimensions of other parts of the plant without an adverse impact on plant processing capacity and effectiveness generally.” Without providing any reasoning or evidence, Mr. Loeffler states, to my understanding, that the only way to solve this “problem” is to provide a lateral conveyor with an intermediate fold, and that the “required” intermediate fold has to occur “in a single depth” so that the lateral conveyor has only one width in the lateral dimension when the lateral conveyor is folded.

25. Mr. Loeffler’s first premise that, to solve the “problem”, a lateral conveyor must have an intermediate fold to provide a mobile screener is not supported by prior art patents cited in his Expert Report, and other prior art patents. Powerscreen’s PCT Patent Application No. WO 85/03652 discloses a mobile aggregate screening machine which has a single depth folded lateral conveyor with no intermediate conveyor fold. This screening machine design was, in fact, commercially marketed by Powerscreen for a number of years. U.S. Patent No. 5,234,564 (Smith), and U.K. Patent No. 1,480,688 (Machines & Structures Ltd.) each disclose a mobile aggregate



screening machine which has a single depth folded lateral conveyor with no intermediate conveyor fold. U.S. Patent No. 5,297,665 (Smith), U.S. Patent No. 3,444,987 (Palmer), and U.S. Patent No. 5,120,433 (Osadchuk) disclose a conveyor device which has a single depth folded lateral conveyor with no intermediate conveyor fold. Extec's U.S. Patent No. 5,333,725 (Douglas) discloses a conveyor frame with no intermediate conveyor fold. All of these prior art designs solve the "problem" without adopting Mr. Loeffler's first premise.

26. Mr. Loeffler's second premise that, to solve the "problem", a lateral conveyor must have an intermediate fold that must occur "in a single depth" to provide a mobile screener is also not supported by prior art patents cited in his Expert Report. The Dominator screener was a mobile aggregate screening machine which was commercially marketed by MastersKreen for a number of years and had an intermediate fold in its lateral conveyors that resulted in a double depth folded lateral conveyor. Extec's U.S. Patent No. 5,086,911 (Douglas) discloses a folding conveyor with two intermediate folds. These prior art designs solve the "problem" without adopting Mr. Loeffler's second premise.

27. Based upon these two premises, which as shown above are faulty, Mr. Loeffler concludes that "there would be only two ways to fold the conveyor, either over the top or along the length to achieve this single depth space limitation." This conclusion is also faulty as there are numerous ways to fold a lateral conveyor so that it only has a single depth. As disclosed in Extec's European Patent Application No. EP 0,338,752 A1 (Fig. 1), which appears to correspond to U.S. Patent No. 5,044,484 (Douglas), the lateral conveyor can be folded vertically upward, and then laterally over the top of the machine. Additionally, to obtain a longer conveyor, the end of the conveyor can be folded again vertically downward, as shown in Fig. 4 of EP '752. Alternatively, a longer conveyor can be folded again, instead of vertically downward, over the top so that the top has

a double depth. This particular design is employed in one lateral conveyor of the Frontier mobile screener sold by Keestrack N.V.

28. Therefore, it is my opinion that Mr. Loeffler's opinion that the "problem" discussed above somehow dictated or limited how a mobile screener should be designed is wrong.

**A. Combining the teachings of the Dominator Screener with PCT Patent Application No. WO 85/03652 (Powerscreen)**

29. Mr. Loeffler's Expert Report, this Expert Report and the '618 patent cite to many prior art patents directed to conveyors and screeners with conveyors. Mr. Loeffler does not identify any reason why a person of ordinary skill in the art at the time of the invention claimed in the '618 patent should chose the Dominator screener as a starting point or as the lead machine design for improvement, given the many other conveyors and screeners with conveyors that were in the prior art at the time of the invention of the '618 patent.

30. Although the Dominator was a functional, commercially marketed mobile screener, Mr. Loeffler cites to no evidence of a motivation or reason for a person of ordinary skill to decide to improve or to change the design of the Dominator screener. Mr. Loeffler also does not identify any known problems that the Dominator screener had that would have motivated a person of ordinary skill to improve the Dominator screener.

31. Additionally, Mr. Loeffler cites to no evidence of a motivation or reason for a person of ordinary skill to decide to select PCT Patent Application No. WO 85/03652 (Powerscreen) from among the many prior art conveyor and screener designs as a source of information to modify the Dominator screener design.

32. However, assuming that a person of ordinary skill would select the Dominator screener as a starting point for further design development, and assuming that a person of ordinary skill would select WO '652 as a source of information to modify the Dominator screener design, in my opinion, the result that a person of ordinary skill would obtain with the combination of the

teachings of the Dominator screener and WO '652 would not look like the lateral conveyor folding design recited in claims 1 and 12 of the '618 patent. In the Dominator screener, a longer lateral conveyor is obtained by creating a hinge in the lateral conveyor and folding the end, or head, section over the remaining portion of the lateral conveyor. By folding the lateral conveyor in this way, a longer lateral conveyor can be used without having the lateral conveyor extend upward beyond the top of the other portions of the screener. In my opinion, a machine (in the folded, transport position) employing the resulting combination would have a lateral conveyor folded longitudinally and slightly inclined to the ground, as shown in Fig. 3 of WO '652 (i.e., boom elevator 18, 20), with a head section folded flat over and outside of the remainder of the lateral conveyor in accordance with how the head section is folded in the Dominator screener. I therefore do not agree with Mr. Loeffler's opinion (pages 24-26) that combining the teachings of the Dominator screener with those of WO '652 would result, to a person of ordinary skill in the art, in the lateral conveyor elbow-folding design recited in claims 1 and 12 of the '618 patent.

33. I see nothing in the Dominator screener literature cited by Mr. Loeffler or in WO '652, and Mr. Loeffler cites to no evidence, that would teach, suggest, or motivate a person of ordinary skill to change the way in which the head section of the conveyor would fold relative to the remainder of the conveyor, that is, to fold in any way different than is done in the Dominator screener or in WO '652.

34. In my opinion, the only way that a person of ordinary skill in the art would be able to combine the teachings of the Dominator screener and WO '652 to result in the folding lateral conveyor design of claims 1 and 12 of the '618 patent would be if that person had knowledge of the invention claimed in the '618 patent or of a machine that used the design covered by the claims of the '618 patent, which at the pertinent time would be impossible and would therefore be designing a machine with 20/20 hindsight.

**B. Combining the teachings of the Dominator Screener with U.S. Patent No. 4,160,501 (Johannsen)**

35. My discussion above with respect why a person of ordinary skill in the art at the time of the invention claimed in the '618 patent should chose the Dominator screener as a starting point or as the lead machine design for improvement, and why such a person would want to modify the Dominator screener apply equally here.

36. Additionally, Mr. Loeffler cites to no evidence of a motivation or reason for a person of ordinary skill to decide to select U.S. Patent No. 4,160,501 (Johannsen) from among the many prior art conveyor and screener designs as a source of information to modify the Dominator screener design.

37. However, assuming that a person of ordinary skill would select the Dominator screener as a starting point for further design development, and assuming that a person of ordinary skill would select Johannsen as a source of information to modify the Dominator screener design, in my opinion, the result that a person of ordinary skill would obtain with the combination of the teachings of the Dominator screener and Johannsen would not look like the lateral conveyor folding design recited in claims 1 and 12 of the '618 patent, but would be exactly the same as the combination of the Dominator screener and WO '652. In Johannsen, a longer conveyor is obtained by creating a hinge in the conveyor and folding the end section along side the remaining portion of the lateral conveyer. By folding the conveyor in this way, a longer conveyor can be used without having the conveyor extend beyond the end of the other portions of the conveyor and its frame.

38. I therefore do not agree with Mr. Loeffler's opinion (pages 24-26) that combining the teachings of the Dominator screener with those of Johannsen would result, to a person of ordinary skill in the art, in the lateral conveyor elbow-folding design recited in claims 1 and 12 of the '618 patent.

39. I see nothing in the Dominator screener literature cited by Mr. Loeffler or in Johannsen, and Mr. Loeffler cites to no evidence, that would teach, suggest, or motivate a person of ordinary skill to change the way in which the head section of the conveyor would fold relative to the remainder of the conveyor, that is, to fold in any way different than is done in the Dominator screener or in Johannsen.

40. In my opinion, the only way that a person of ordinary skill in the art would be able to combine the teachings of the Dominator screener and Johannsen to result in the folding lateral conveyor design of claims 1 and 12 of the '618 patent would be if that person had knowledge of the invention claimed in the '618 patent or of a machine that used the design covered by the claims of the '618 patent, which at the pertinent time would be impossible and would therefore be designing a machine with 20/20 hindsight.

**C. Combining the teachings of the Dominator Screener with the MasterStock 70 or 80 and/or U.S. Patent No. 3,444,987 (Palmer)**

41. As stated above, the Expert Report of Loeffler (dated June 27, 2008) provides insufficient information for me to understand how the MasterStock 70 and 80 conveyors operate, and I am unfamiliar with them. Since the Expert Reports of Goffney (dated June 27, 2008) (¶ 97) and Loeffler ((page 26) indicate that U.S. Patent No. 3,444,987 (Palmer) teaches the same pivoting mechanism of the MasterStock 70 and 80 conveyors, I shall discuss these assuming that they are the same and will refer in my discussion to Palmer.

42. My discussion above with respect why a person of ordinary skill in the art at the time of the invention claimed in the '618 patent should chose the Dominator screener as a starting point or as the lead machine design for improvement, and why such a person would want to modify the Dominator screener apply equally here.

43. Additionally, Mr. Loeffler cites to no evidence of a motivation or reason for a person of ordinary skill to decide to select U.S. Patent No. 3,444,987 (Palmer) from among the many prior

art conveyor and screener designs as a source of information to modify the Dominator screener design.

44. However, assuming that a person of ordinary skill would select the Dominator screener as a starting point for further design development, and assuming that a person of ordinary skill would select Palmer as a source of information to modify the Dominator screener design, in my opinion, the result that a person of ordinary skill would obtain with the combination of the teachings of the Dominator screener and Palmer would not look like the lateral conveyor folding design recited in claims 1 and 12 of the '618 patent, but would be exactly the same as the combination of the Dominator screener and WO '652, and exactly the same as the combination of the Dominator screener and Johannsen. In Palmer, as in Johannsen, a longer conveyor is obtained by creating a hinge in the conveyor and folding the end section along side the remaining portion of the lateral conveyor. By folding the conveyor in this way, a longer conveyor can be used without having the conveyor extend beyond the end of the other portions of the conveyor and its frame. I therefore do not agree with Mr. Loeffler's opinion (pages 26-27) that combining the teachings of the Dominator screener with those of Palmer would result, to a person of ordinary skill in the art, in the lateral conveyor elbow-folding design recited in claims 1 and 12 of the '618 patent.

45. I see nothing in the Dominator screener literature cited by Mr. Loeffler or in Palmer, and Mr. Loeffler cites to no evidence, that would teach, suggest, or motivate a person of ordinary skill to change the way in which the head section of the conveyor would fold relative to the remainder of the conveyor, that is, to fold in any way different than is done in the Dominator screener or in Palmer.

46. In my opinion, the only way that a person of ordinary skill in the art would be able to combine the teachings of the Dominator screener and Palmer to result in the folding lateral conveyor design of claims 1 and 12 of the '618 patent would be if that person had knowledge of the

invention claimed in the '618 patent or of a machine that used the design covered by the claims of the '618 patent, which at the pertinent time would be impossible and would therefore be designing a machine with 20/20 hindsight.

**D. Combining the teachings of PCT Patent Application WO 85/03652 (Powerscreen) with european patent application no. EP 0,338,752 A1 (Exttec)**

47. Mr. Loeffler's Expert Report, this Expert Report and the '618 patent cite to many prior art patents directed to conveyors and screeners with conveyors. Mr. Loeffler does not identify any reason why a person of ordinary skill in the art at the time of the invention claimed in the '618 patent should chose the WO '652 as a starting point or as the lead machine design for improvement, given the many other conveyors and screeners with conveyors that were in the prior art at the time of the invention of the '618 patent.

48. Powerscreen commercially made and sold a great number of screeners embodying the design of Powerscreen's WO '652, so presumably the design disclosed in WO '652 was functional. Mr. Loeffler cites to no evidence of a motivation or reason for a person of ordinary skill to decide to improve or to change the design of Powerscreen's WO '652. Mr. Loeffler also does not identify any known problems that the design of Powerscreen's WO '652 had that would have motivated a person of ordinary skill to improve Powerscreen's WO '652.

49. Additionally, Mr. Loeffler cites to no evidence of a motivation or reason for a person of ordinary skill to decide to select European patent application No. EP 0,338,752 A1 (Exttec) from among the many prior art conveyor and screener designs as a source of information to modify the design of Powerscreen's WO '652.

50. However, assuming that a person of ordinary skill would select Powerscreen's WO '652 as a starting point for further design development, and assuming that a person of ordinary skill would select EP '752 as a source of information to modify WO '652, in my opinion, the result



that a person of ordinary skill would obtain with the combination of the teachings of WO '652 and EP '752 would not look like the lateral conveyor folding design recited in claims 1 and 12 of the '618 patent. In EP '752, a longer conveyor is obtained by having the extend up and over the top of the rest of the machine. By folding the conveyor in this way, a longer conveyor can be used without having the conveyor extend upward beyond the top of the other portions of the machine. In my opinion, a machine (in the folded, transport position) employing the resulting combination would have a lateral conveyor folded longitudinally and slightly inclined to the ground, as shown in Fig. 3 of WO '652 (i.e., boom elevator 18, 20), with a head section vertically upward and that folded over the top of the screener. I therefore do not agree with Mr. Loeffler's opinion (page 27) that combining the teachings of WO '652 with those of EP '752 would result, to a person of ordinary skill in the art, in the lateral conveyor elbow-folding design recited in claims 1 and 12 of the '618 patent.

51. I see nothing in EP '752, and Mr. Loeffler cites to no evidence, that would teach, suggest, or motivate a person of ordinary skill to change the way in which the head section of the conveyor would fold relative to the remainder of the conveyor, that is, to fold in any way different than is done in EP '752, i.e., vertically upward and then over the top of the machine.

52. In my opinion, the only way that a person of ordinary skill in the art would be able to combine the teachings of WO '652 and EP '752 to result in the folding lateral conveyor design of claims 1 and 12 of the '618 patent would be if that person had knowledge of the invention claimed in the '618 patent or of a machine that used the design covered by the claims of the '618 patent, which at the pertinent time would be impossible and would therefore be designing a machine with 20/20 hindsight.



**E. Claim 2 of the '618 patent is not disclosed by the cited prior art patents**

53. Mr. Loeffler asserts (page 21) that the limitations of claim 2 are disclosed by U.S. Patent No. 5,234,564 (Smith), U.S. Patent No. 4,983,280 (Eriksson), U.S. Patent No. 4,160,501 (Johannsen), U.S. Patent No. 4,245,732 (Couperus), U.S. Patent No. 3,444,987 (Palmer), and the MastersKreen MasterStock 70 and 80. I disagree with Mr. Loeffler's opinion since none of these patents disclose or suggests a pivot joint connecting a head conveyor section and a tail conveyor section in which the pivot axis of the pivot joint extends substantially perpendicular to the conveyor plane of the conveyor to enable the head section in the transport position to extend longitudinally and to enable the tail section in the transport position to extend substantially upright, as recited in claim 2.

**VII. ADVANTAGES OF THE INVENTION OF THE '618 PATENT**

54. I am familiar with various mobile screeners that were commercially available before the invention of the '618 patents. One of those screeners commercially sold by Powerscreen is described in Powerscreen's PCT Patent Application WO 85/03652, corresponding to U.S. Patent No. 4,983,280 (Eriksson). That screener suffered from three significant problems, as briefly mentioned in the '618 patent (col. 1, lines 53-60). First, when the lateral conveyors were in the folded, transport position, the lateral conveyors obstructed access by a user to a number of levers and other controls and to the diesel engine. Such obstructed access not only made an initial set-up of the machine somewhat difficult, but problems also arose if a mechanic needed to have access to the controls or the engine for maintenance purposes. Second, because the width of the entire machine had to be sufficiently narrow so as not to exceed vehicle width restrictions for road travel, the combined thicknesses of the two lateral conveyors in the transport position along side the main central conveyor reduced the maximum possible width of the main central conveyor. A third problem not mentioned in the '618 patent is it took an operator up to about 45 minutes to set up the

lateral conveyors and other components for operation from their transport positions and up to 45 minutes to place the lateral conveyors and other components into their fully transportable position from their operational positions.

55. In contrast, and as described in the '618 patent (see, for example, col. 2, line 62 to col. 3, line 5), a screener in accordance with the claims of the '618 patent does not suffer these disadvantages. First, because in the transport position the lateral conveyors extend upward and then longitudinally, they do not obstruct access to various controls and levers or the diesel engine. Accordingly, an operation has easy unobstructed access to these components even when the lateral conveyors are in the transport position. This access is important because screeners frequently breaks down when the lateral conveyors are in the transport position. Second, having the lateral conveyors extend upward and then longitudinally in their transport positions unexpectedly allows the main central conveyor to be wider without requiring the entire screener to be wider. If the width of the central conveyor is wider, the entire throughput volume of the screener can be increased. Calculations show that an increase of main conveyor width by 33% (i.e., 36" to 48") unexpectedly results in an increase in central conveyor throughput by about 77%. (See attached Exhibit SAW 19). In particular, the invention claimed in the '618 patent allows the width of the main central conveyor to increase from about 36" to about 48". Since customers want to be able to process as much material as possible in the same amount of time, such a dramatic increase in throughput volume is very desirable. Third, the screener design claimed in the '618 patent allowed the screener to be setup and taken down in 15 minutes or less. Because screeners are frequently moved by contractors from one job site to another, and from one location to another at the same job site in accordance with work demands, reducing the down time of the screener increases productivity and reduces operational costs.

56. Other prior art screeners that had removable lateral conveyors required even longer setup and take down times and, in addition, required supplemental equipment to lift and move the heavy conveyors. Such screeners thus posed safety issues during setup and take down, as well as width and height problems during transport because the detached lateral conveyors has to be stored somewhere on the screener during road transport. These disadvantages are described in the '618 patent. (col. 1, lines 33-42).

I declare under penalty of perjury that the foregoing is true and correct.

Dated: September 5, 2008

  
Stephen A. Whyte

#71334.1

## **SAW Exhibit 10**





**E-7 (Exttec)**





E-7 (EXTEC)





E-7 (EXTEC)



## **SAW Exhibit 11**





**Novum (KEESTRACK)**





**Novum (KEESTRACK)**